CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER R5-2017-0104

AMENDING
WASTE DISCHARGE REQUIREMENTS ORDER R5-2014-0042
(NPDES PERMIT NO. CA0079430)
FOR
MARIPOSA PUBLIC UTILITY DISTRICT
MARIPOSA WASTEWATER TREATMENT FACILITY
MARIPOSA COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereinafter Central Valley Water Board) finds that:

1. On 6 December 2007, the Central Valley Water Board adopted Waste Discharge Requirements (WDRs) Order R5-2007-0171, prescribing waste discharge requirements for the Mariposa Public Utility District (Discharger), Mariposa Wastewater Treatment Facility (Facility), in Mariposa County. The Discharger provides sewerage service for the community of Mariposa and serves a population of approximately 2,000. The Facility is permitted to discharge an average dry weather flow of 0.61 million gallons per day of treated wastewater to Mariposa Creek.

2. WDRs Order R5-2007-0171, Provision VI.C.6.a required wastewater to be oxidized, coagulated, filtered, and adequately disinfected pursuant to the State Water Resources Control Board, Division of Drinking Water (formerly California Department of Public Health) reclamation criteria, California Code of Regulations, Title 22, Division 4, Chapter 3 (Title 22), or equivalent.

3. Finding the Discharger could not comply with the equivalent to Title 22 disinfected tertiary recycled water requirements, WDRs Order R5-2007-0171 included a compliance schedule for the tertiary level of treatment, or equivalent, and associated limitations by 4 December 2017.

4. The Discharger proposed to comply with equivalent to Title 22 requirements and final effluent limitations by following the 2010 Facility Plan developed by Carollo Engineers for upgrades, including installation of tertiary treatment, nitrification/denitrification, and ultraviolet light disinfection.

5. On 28 March 2014, the Central Valley Water Board adopted WDRs Order R5-2014-0042 for the Facility, rescinding WDRs Order R5-2007-0171. WDRs Order R5-2014-0042 includes the following items:

    a. Provision VI.C.4.a prescribes filtration system operating specifications to ensure the filtration system is operating properly to provide adequate disinfection.

    b. Provision VI.C.6.a requires wastewater to be oxidized, coagulated, filtered, and adequately disinfected pursuant to Title 22 requirements or equivalent.

    c. The Monitoring and Reporting Program prescribes certain monitoring requirements for the influent, effluent, and ultraviolet disinfection system to begin 4 December 2017 once the Facility upgrades have been completed.

6. WDRs Order R5-2014-0042, Provision VI.C.7.a includes a compliance schedule for the Discharger to comply with turbidity operating specifications in Provision VI.C.4.a, achieve treatment equivalent to Title 22 in Provision VI.C.6.a, and comply with final effluent limitations for biochemical oxygen demand, total suspended solids, and total coliforms by 4 December 2017.

7. On 14 March 2017, the Discharger submitted a Time Schedule Extension Request to, among other things, extend the final date in the compliance schedule at Provision VI.C.7.a and to postpone the date to begin monitoring associated with the future Facility upgrades. However, implementing all the requested changes would be inconsistent with policy. Compliance schedules for final effluent limitations cannot be extended beyond ten years, in accordance with State Water Resources Control Board Resolution No. 2008-0025*, Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits*. Thus, the portion of compliance schedule Provision VI.C.7.a relevant to final effluent limitations cannot be extended in the permit. Instead, Time Schedule Order R5-2017-0105 was adopted, including time schedules for compliance with effluent limitations for biochemical oxygen demand, total suspended solids, and total coliforms.

8. The Time Schedule Extension Request explains that the application for and approval of financial assistance through the Clean Water State Revolving Fund program took several years. Additionally, from 13 February 2015 through 4 October 2016, the Discharger faced a Clean Water Act section 505 Citizen Enforcement Suit which required extensive time and financial resources to address.

9. These delays encountered during the funding procurement process is new information not available and unforeseen by the Central Valley Water Board at the time of adoption of WDRs Order R5-2014-0042, and which would have justified a different compliance date at the time of adoption. The proposed amended compliance date of 18 May 2020 is as short as practicable taking into account time required to complete design, construction, and startup operations.

10. Per Title 40, Code of Federal Regulations section 122.62(a)(2), this Order amends WDRs Order R5-2014-0042 to extend, though 17 May 2020, the dates for achieving an effluent quality equivalent to Title 22 disinfected tertiary recycled water, meeting turbidity operating specifications, and beginning specific monitoring associated with the planned Facility upgrades.

11. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act pursuant to Water Code section 13389, since the adoption or modification of a NPDES permit for an existing source is statutorily exempt and this Order only serves to implement a NPDES permit. (*Pacific Water Conditioning Ass'n, Inc. v. City Council of City of Riverside* (1977) 73 Cal.App.3d 546, 555-556.).

12. On 20 October 2017 in Redding, California, after due notice to the Discharger and all other affected persons, the Central Valley Water Board conducted a public hearing at which evidence was received to consider amending Waste Discharge Requirements Order R5-2014-0042.

IT IS HEREBY ORDERED THAT Waste Discharge Requirements (WDRs) Order R5-2014-0042 (NPDES Permit CA0079430) is amended as shown in underline/strikeout format in Attachment 1.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 20 October 2017.

Original signed by

PAMELA C. CREEDON, Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

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ORDER R5-2014-0042-01
NPDES NO. CA0079430

WASTE DISCHARGE REQUIREMENTS FOR THE
MARIPOSA PUBLIC UTILITY DISTRICT
MARIPOSA WASTEWATER TREATMENT FACILITY
MARIPOSA COUNTY

The following Discharger is subject to waste discharge requirements (WDRs) set forth in this Order:

Table 1. Discharger Information

Discharger	Mariposa Public Utility District
Name of Facility	Mariposa Wastewater Treatment Facility
Facility Address	4956 Miller Road
	Mariposa, CA 95338
	Mariposa County

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Disinfected Secondary Effluent	37° 28' 45.11" N	119° 57' 32.76" W	Mariposa Creek

Table 3. Administrative Information

This Order was adopted on:	28 March 2014
This Order shall become effective on:	1 May 2014
This Order shall expire on:	30 April 2019
The Discharger shall file a Report of Waste Discharge as an application for reissuance of WDRs in accordance with title 23, California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than:	1 November 2018
The U.S. Environmental Protection Agency (USEPA) and the California Regional Water Quality Control Board, Central Valley Region have classified this discharge as follows:	Minor

I, PAMELA C. CREEDON, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on ~~the date indicated above~~28 March 2014, and amended on 20 October 2017.

PAMELA C. CREEDON, Executive Officer

implement feasible methods for reducing the amount of chemical additives that increase the salinity and other constituent concentrations or levels in the discharge, while still providing adequate treatment. The plan shall be completed and submitted to the Central Valley Water Board by **1 November 2018**.

4. Construction, Operation, and Maintenance Specifications

a. **Filtration System Operating Specifications**

i. **Effective** 18 May 2020~~4 December 2017~~, to ensure the filtration system is operating properly to provide adequate disinfection of the wastewater, the turbidity of the filter effluent measured at Monitoring Location FIL-002 shall not exceed any of the following when coagulation is used:

(a) 2 NTU, as a 24-hour average;
(b) 5 NTU, more than 5 percent of the time within a 24-hour period; and
(c) 10 NTU, at any time.

ii. **Effective** 18 May 2020~~4 December 2017~~, when coagulation is not used, the Discharger shall operate the treatment system to ensure:

(a) the turbidity of the influent to the filtration unit measured at FIL-001 (see MRP, Attachment E) shall not exceed 5 NTU for more than 15 minutes and never exceed 10 NTU; and

(b) the effluent turbidity measured at FIL-002 (see MRP, Attachment E) shall not exceed 2 NTU at any time

iii. During the period beginning **1 May 2014** and ending on 17 May 2020~~3 December 2017~~, the turbidity of the effluent measured at Monitoring Location EFF-001 shall not exceed any of the following:

(a) 5 NTU, more than 5 percent of the time within a 24-hour period; and
(b) 10 NTU, at any time.

b. **Ultraviolet Light (UV) Disinfection System Operating Specifications.** The Discharger shall notify the Central Valley Water Board at least 30 days prior to start-up of the UV disinfection system. Once in operation, the UV disinfection system must be operated in accordance with an operations and maintenance program that ensures adequate disinfection, and shall meet the following minimum specifications to provide virus inactivation equivalent to Title 22 Disinfected Tertiary Recycled Water:

i. **UV Dose.** The minimum hourly average UV dose in the UV reactor shall be 100 millijoules per square centimeter (mJ/cm^2).

ii. **UV Transmittance.** The minimum hourly average UV transmittance (at 254 nanometers) in the wastewater measured at UVS-001 shall not fall below 55 percent.

iii. The lamp sleeves and cleaning system components must be visually inspected per the manufacturer's operations manual for physical wear (scoring, solarization, seal leaks, cleaning fluid levels, etc.) and to check the efficacy of the cleaning system.

iv. The lamp sleeves must be cleaned periodically as necessary to meet the UV dose requirements.

(a) Sources and amounts of biosolids generated annually.

(b) Location(s) of on-site drying and storage and description of the containment area and containment features.

(c) Plans for ultimate disposal. For landfill disposal, include the present classification of the landfill and the name and location of the landfill.

vi. The Discharger is encouraged to comply with the "*Manual of Good Practice for Agricultural Land Application of Biosolids*" developed by the California Water Environment Association.

vii. Use of biosolids as a soil amendment shall comply with valid WDRs issued by the State or Regional Water Boards. In most cases, this means the WDRs contained in State Water Board Water Quality Order 2004-0012-DWQ, General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities (Biosolids General Order). For a biosolids use project to be covered by the Biosolids General Order, the Discharger must file a complete Notice of Intent and receive a Notice of Applicability for each project.

b. **Collection System.** On 2 May 2006, the State Water Board adopted State Water Resources Control Board Order 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. The Discharger shall be subject to the requirements of Order 2006-0003-DWQ and any future revisions thereto. Order 2006-0003-DWQ requires that all public agencies that currently own or operate sanitary sewer systems apply for coverage. The Discharger has applied for and has been approved for coverage under Order 2006-0003-DWQ for operation and maintenance of its sanitary sewer collection system.

c. **Continuous Monitoring Systems.** This Order, and the Monitoring and Reporting Program which is a part of this Order, requires that certain parameters be monitored on a continuous basis. The Facility is not staffed on a full time basis. Violations of this Order or system upsets can go undetected during this period. The Discharger shall establish an electronic system for operator notification for continuous recording device alarms. For existing continuous monitoring systems, the electronic notification system should already be installed. For systems installed following Order adoption, the notification system shall be installed simultaneously.

6. Other Special Provisions

a. By ~~4 December 2017~~18 May 2020, wastewater shall be oxidized, coagulated, filtered, and adequately disinfected pursuant to the California Department of Public Health (DPH) reclamation criteria, CCR, Title 22, division 4, chapter 3, (Title 22), or equivalent, in accordance with the compliance schedule in Section VI.C.7.a.

7. Compliance Schedules

a. **Compliance Schedules for Tertiary Treatment.** This Order requires compliance with the final effluent limitations for BOD_5, TSS, and total coliform in Section IV.A.1 by 4 December 2017; the operational specifications for turbidity in Section VI.C.4.a, and the Title 22 disinfection requirements in Section VI.C.6.a of this Order by ~~4 December 2017~~18 May 2020. The Discharger shall comply with the following compliance schedule to ensure compliance with these requirements:

Task	Date Due
i. Continue to implement the July 2010	Permit effective date

Task	Date Due
Facility Plan	
ii. Progress Reports[1]	**1 June** and **1 December**, semi-annually, until final compliance
iii. Submit draft California Environmental Quality Act documentation	**1 October 2014**
iv. Submit written certification that a Financial Assistance application has been submitted to the State Water Resources Control Board	**1 December 2014**
v. Submit documentation that the design of tertiary, UV, and nitrogen removal upgrades has been initiated.	**1 July 2015**
vi. Submit documentation that construction has initiated	~~**1 October 2016**~~ **1 December 2017**
vii. Full Compliance with the final effluent limitations for BOD_5, TSS, and total coliform in Section IV.A.1	**4 December 2017**
viii. Full Compliance with the operational specifications for turbidity in Section VI.C.4.a and the Title 22 disinfection requirements in Section VI.C.6.a	**18 May 2020**

[1] The progress reports shall detail what steps have been implemented towards achieving compliance with waste discharge requirements, including studies, funding status, construction progress, evaluation of measures implemented, and recommendations for additional measures as necessary to achieve full compliance by the final compliance date.

VII. COMPLIANCE DETERMINATION

A. BOD_5 and TSS Effluent Limitations (Sections IV.A.1.a, IV.A.1.b, and IV.A.2.a). Compliance with the final and interim effluent limitations for BOD_5 and TSS required in Limitations and Discharge Requirements sections IV.A.1.a and IV.A.2.a shall be ascertained by composite samples (as noted in Footnote 1 in Tables E-2 and E-3 of Attachment E). Compliance with effluent limitations required in Limitations and Discharge Requirements section IV.A.1.b for percent removal shall be calculated using the arithmetic mean of BOD_5 and TSS in effluent samples collected over a monthly period as a percentage of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period.

B. Average Dry Weather Flow Effluent Limitation (Section IV.A.1.h). The average dry weather discharge flow represents the daily average flow when groundwater is at or near normal and runoff is not occurring. Compliance with the average dry weather flow effluent limitation will be determined annually based on the average daily flow over three consecutive dry weather months (e.g., July, August, and September).

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Non-Conventional Pollutants				
Electrical Conductivity @ 25°C	µmhos/cm	Grab or Composite	1/Week	2

1 Composite samples shall be 8-hour composites. The Discharger shall alternate the 8-hour period during which composite samples are collected, where one composite sample captures morning/mid-morning peak flows and the next composite sample captures afternoon/evening peak flows. Beginning on **18 May 2020** ~~**4 December 2017**~~, the Discharger shall collect 24-hour flow proportional composite samples.

2 Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136; or by methods approved by the Central Valley Water Board or the State Water Board.

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF-001

1. The Discharger shall monitor the effluent at Monitoring Location EFF-001 as follows.

Table E-3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	Meter	Continuous	--
Conventional Pollutants				
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	Composite[1]	1/Week	2
	lbs/day	Calculate	1/Week	--
	% removal	Calculate	1/Month	--
pH	standard units	Grab	1/Week[3]	2,4
Total Suspended Solids	mg/L	Composite[1]	1/Week	2
	lbs/day	Calculate	1/Week	--
	% removal	Calculate	1/Month	--
Priority Pollutants				
Chlorodibromomethane	µg/L	Grab	1/Month	2,5,15
Copper, Total Recoverable	µg/L	Composite[1]	1/Month[8]	2,5
Dichlorobromomethane	µg/L	Grab	1/Month	2,5,15
Methyl Bromide (Bromomethane)	µg/L	Grab	1/Month[19]	2,5,15
Zinc, Total Recoverable	µg/L	Composite[1]	1/Month[8]	2,5
Priority Pollutants and Other Constituents of Concern	vary	Grab/ Composite[1,15]	1/Quarter[16,17]	2,5,13,14
Non-Conventional Pollutants				
Aluminum, Total Recoverable	µg/L	Grab	1/Year[8]	18
Ammonia Nitrogen, Total (as N)	mg/L	Grab	1/Week[3,6]	2
	lbs/day	Calculate	1/Week	--
Chlorine, Total Residual	mg/L	Meter	Continuous	2,7
Electrical Conductivity @ 25°C	µmhos/cm	Grab or Composite	1/Week	2,4
Hardness, Total (as $CaCO_3$)	mg/L	Grab	1/Month[8]	2
Nitrate Nitrogen, Total (as N)	mg/L	Grab	1/Month[9]	2
Nitrate plus Nitrite (as N)	mg/L	Grab	1/Month[9]	2

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Nitrite Nitrogen, Total (as N)	mg/L	Grab	1/Month[9]	[2]
Settleable Solids	ml/L	Grab	1/Week	[2]
Standard Minerals[10]	mg/L	Grab	1/Year	[2]
Temperature	°C/°F	Grab	1/Week[3]	[2,4]
Total Coliform	MPN/100 mL	Grab	3/Week[11]	[2]
Total Trihalomethanes[12]	µg/L	Grab	1/Month	[2,15]
Turbidity	NTU	Grab	1/Month	[2,4]

1 Composite samples shall be 8-hour composites. The Discharger shall alternate the 8-hour period during which composite samples are collected, where one composite sample captures morning/mid-morning peak flows and the next composite sample captures afternoon/evening peak flows. Beginning on **18 May 2020~~4 December 2017~~**, the Discharger shall collect 24-hour flow proportional composite samples.

2 Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.

3 pH and temperature shall be recorded at the time of ammonia sample collection.

4 A hand-held field meter may be used, provided the meter utilizes a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.

5 Reporting levels shall be equal to the reporting levels specified in Attachment I of this Order. If more than one analytical test method and reporting level is listed for a given parameter in Attachment I, the Discharger may select from the listed methods and corresponding reporting level.

6 Concurrent with whole effluent toxicity monitoring.

7 Total chlorine residual must be monitored with a method sensitive to and accurate at the permitted level of 0.01 mg/L. Total chlorine residual monitoring is only required when chlorine is used in the treatment process.

8 Hardness samples shall be collected concurrently with metals samples.

9 Monitoring for nitrite, nitrate, and nitrate plus nitrite shall be conducted concurrently.

10 Standard minerals shall include the following: boron, calcium, iron, magnesium, potassium, sodium, chloride, manganese, phosphorus, total alkalinity (including alkalinity series), and hardness, and include verification that the analysis is complete (i.e., cation/anion balance).

11 Samples for total coliform may be collected at any point following disinfection.

12 Total trihalomethanes include bromoform, chlorodibromomethane, chloroform, and dichlorobromomethane.

13 In order to verify if bis(2-ethylhexyl) phthalate is truly present in the effluent discharge, the Discharger shall take steps to ensure that sample containers, sampling apparatus, and analytical equipment are not sources of the detected contaminant.

14 Total mercury samples shall be taken using clean hands/dirty hands procedures, as described in USEPA method 1669: *Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels*, for collection of equipment blanks (section 9.4.4.2), and shall be analyzed by USEPA method 1630/1631 (Revision E) with a method detection limit of 0.2 ng/L.

15 Samples for volatile constituents shall be collected in accordance with 40 CFR Part 136.

16 Samples shall be collected quarterly (1/quarter) for four consecutive quarters during the fourth year of the permit, beginning with the fourth quarter of 2017. Samples shall be spaced evenly throughout the year.

17 Samples shall be collected at approximately the same time as receiving water samples for priority pollutants and other constituents of concern.

18 Aluminum shall be analyzed using either total or acid-soluble (inductively coupled plasma/atomic emission spectrometry or inductively coupled plasma/mass spectrometry) analysis methods, as supported by USEPA's Ambient Water Quality Criteria for Aluminum document (EPA 440/5-86-008), or other standard methods that exclude aluminum silicate particles as approved by the Executive Officer.

19 Monitoring shall be conducted monthly (1/month) for the first year following the effective date of the permit. However, if methyl bromide is detected at or above the criterion, thereby triggering the study contained in Provision VI.C.2.c., then monitoring shall continue for the entirety of the study.

c. Aquatic life (including plants, fish, shellfish, birds),
d. Visible film, sheen, or coating,
e. Fungi, slime, or objectionable growths, and
f. Potential nuisance conditions.

Notes on receiving water conditions shall be summarized in the monitoring report.

IX. OTHER MONITORING REQUIREMENTS

A. Biosolids

1. Monitoring Location BIO-001

a. A composite sample of sludge shall be collected **annually (1/year)** at Monitoring Location BIO-001 in accordance with USEPA's *POTW Sludge Sampling and Analysis Guidance Document*, August 1989, and tested for the metals listed in Title 22, CCR, Section 66261.24 (Table II).

b. Biosolids monitoring shall be conducted using the methods in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (EPA publication SW-846), as required in 40 CFR 503.8(b)(4). All results must be reported on a 100% dry weight basis. Records of all analyses must state on each page of the laboratory report whether the results are expressed in "100% dry weight" or "as is".

c. Sampling records shall be retained for a minimum of 5 years. A log shall be maintained of sludge quantities generated and of handling and disposal activities.

B. Municipal Water Supply

1. Monitoring Location SPL-001

The Discharger shall monitor the municipal water supply at Monitoring Location SPL-001 as follows. If the water supply is from more than one source, the total dissolved solids and electrical conductivity shall be reported as a weighted average and include copies of the supporting calculations.

Table E-7. Municipal Water Supply Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Electrical Conductivity @ 25°C	µmhos/cm	Grab	1/Year	[1]
Total Dissolved Solids[1]	mg/L	Grab	1/Year	[1]

[1] Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.

C. Filtration System and Ultraviolet Light (UV) Disinfection System

1. Monitoring Locations UVS-001, FIL-001, and FIL-002

Beginning on ~~4 December 2017~~18 May 2020, the Discharger shall monitor the UV disinfection system as follows:

Table E-8. Ultraviolet Light Disinfection System Monitoring Requirements

Parameter	Units	Sample Type	Monitoring Location	Minimum Sampling Frequency
Flow	MGD	Meter	UVS-001	Continuous[1]
Turbidity	NTU	Meter	FIL-001	Continuous[1,2,3]
Turbidity	NTU	Meter	FIL-002	Continuous[1,2]

two secondary clarifiers and the chlorine contact basin rather than at the outfall. The Facility representative stated that the return sludge cycle for the secondary clarifiers affects the effluent flow meter readings and does not provide an accurate measurement of total flow on the chart recorder. Therefore, the Discharger does not use the effluent reading and reports influent flow at the Facility headworks as the effluent flow on the self-monitoring reports (SMRs).

c. Attachment E, Provision I.D of Order R5-2007-0171 requires appropriate flow measurement devices and methods to ensure reliability of measurements of the volume of the monitored discharges. All monitoring instruments and devices used by the Discharger shall be properly maintained and calibrated as necessary to ensure their continued accuracy. The Facility representative stated the effluent totalizer was not functional. As stated above, the effluent flow meter does not provide an accurate measurement of flow on the chart recorder so the Discharger has chosen to report Facility influent flow as the effluent flow on the SMRs.

d. Attachment E, Section X.D.4.c of Order R5-2007-0171 requires that the Discharger include "*A statement certifying when the flow meter(s) and other monitoring instruments and devices were last calibrated, including identification of who performed the calibration*" in their Annual Operations Report by 30 January of each year. Flow measurement devices are to be calibrated at least once per year. The Annual Operations report for 2009 did not contain this statement and no records were available at the Facility to confirm that the influent and effluent flow meters were calibrated. This was a recurring Major Finding from a previous inspection.

e. Special Provision VI.C.7.d of Order R5-2007-0171 required the submittal of a Work Plan and time schedule by 5 March 2008, for the installation of a continuous chlorine residual meter. A review of records for the Facility maintained at the Central Valley Water Board office indicated that this work plan had not been submitted to the Central Valley Water Board. It should be noted that full compliance with the requirement to install a continuous chlorine residual meter was required by 4 December 2012, which the Discharger met.

2. An inspection of Mariposa Creek downstream of Discharge Point 001 was conducted on 30 September 2010 in response to a 22 July 2010 complaint. The complainant indicated that the Facility could be causing an absence of aquatic life in the receiving water downstream of Discharge Point 001. During the inspection, Central Valley Water Board staff found unidentified species of fish and tadpoles alive in the receiving water at several downstream points in Mariposa Creek.

E. Planned Changes

In order to comply with the requirements of this Order, the Discharger is planning to construct upgrades to the treatment system to provide tertiary treatment, nitrification/denitrification, and ultraviolet light (UV) disinfection. The planned upgrades are scheduled to be completed ~~in~~ by May 2020~~December 2017, contingent on funding~~.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in this Order are based on the requirements and authorities described in this section.

A. Legal Authorities

This Order serves as WDRs pursuant to article 4, chapter 4, division 7 of the California Water Code (Water Code; commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by

corresponding removal rate of the system. The application of tertiary treatment processes results in the ability to achieve lower levels for BOD_5 and TSS than the secondary standards currently prescribed. Therefore, this Order requires AMELs for BOD_5 and TSS of 10 mg/L and an average monthly percent removal requirement of 90%, which is technically based on the capability of a tertiary system. In addition to the average weekly effluent limitations (AWELs) and AMELs, an MDEL for BOD_5 and TSS is included in the Order to ensure that the treatment works are not organically overloaded and operate in accordance with design capabilities.

(d) **Plant Performance and Attainability.** The Facility is not designed to provide a tertiary level of treatment. New or modified control measures are necessary in order to comply with the effluent limitations, and the new or modified control measures cannot be designed, installed and put into operation within 30 calendar days. This Order includes a compliance schedule at Section VI.C.7.a for the Discharger to achieve compliance with the final effluent limitations for BOD_5, TSS, and total coliform in Section IV.A.1. by 4 December 2017; and the operational specifications for turbidity in Section VI.C.4.a, and the Title 22 disinfection requirements in Section VI.C.6.a of this Order by ~~4 December 2017~~18 May 2020.

viii. **pH**

(a) **WQO.** The Basin Plan includes a water quality objective for surface waters (except for Goose Lake) that the *"…pH shall not be depressed below 6.5 nor raised above 8.5."*

(b) **RPA Results.** Raw domestic wastewater inherently has variable pH. Additionally, some wastewater treatment processes can increase or decrease wastewater pH which if not properly controlled, would violate the Basin Plan's numeric objective for pH in the receiving water. Therefore, reasonable potential exists for pH and WQBELs are required.

Federal regulations at 40 CFR 122.44(d)(1)(i) require that, "*Limitations must control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality.*" For priority pollutants, the SIP dictates the procedures for conducting the RPA. pH is not a priority pollutant. Therefore, the Central Valley Water Board is not restricted to one particular RPA method. Due to the site-specific conditions of the discharge, the Central Valley Water Board has used professional judgment in determining the appropriate method for conducting the RPA for this non-priority pollutant constituent.

USEPA's September 2010 NPDES Permit Writer's Manual, page 6-30, states, "*State implementation procedures might allow, or even require, a permit writer to determine reasonable potential through a qualitative assessment process without using available facility-specific effluent monitoring data or when such data are not available…A permitting authority might also determine that WQBELs are required for specific pollutants for all facilities that exhibit certain operational or discharge characteristics (e.g., WQBELs for pathogens in all permits for POTWs discharging to contact recreational waters).*" USEPA's TSD also